Haier SERVICE MANUAL

Order No.Ref1411S025V1

Refrigerator

MODEL:HRF-800DGS8

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It dose not contain warnings and cautions to advice non-technical individuals of potential dangers in attempting to service a product. Product powered by electricity should by serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

©2013(HAIER ELECTRICAL APPLIANCES COR. LTD)
All right reserved. Unauthorized copying and distribution is a violation of law.

Haier Group Version: V1 Date: 20141113

SERVICE MANUAL

Model: HRF-800DGS8

Issue	2014-11-13
REF.	Ref1411S025V1

Contents

Chapter 1 General Information 3
1-1. General Guidelines 3
1-2. Insurance test 3
1-3. How to read this Service Manual 4
Chapter 2 Product Feature 5
2-1. Specifications 5
2-2. Main Functions 6
2-3. External views 7
Chapter3 Disassembly and Installation 8
3-1. REF& freezer wind passage disassembly 8
3-2. Control PCB disassembly 10
3-3 Display Panel Disassembly 11
Chapter4 Control and display system 12
Chapter 5 Control principal and related test functions 15
5-1. Control principle of fan motor 15
5-2. Defrost control 15
5-3. Self-testing function 15
Chapter 6 System flow principle 16
Chapter 7 Circuit diagram 17
7-1. Main control PCB diagram 17
7-2. Brief principle diagram 18
7-3. Sensors and error codes 19
7-4. The combination key 21
Chapter 8 Refrigerator control principle 22
8-1.The refrigerator temperature control introduction 22
8-2. The defrosting control introduction 22
Chapter 9 Trouble shooting 24

Chapter 1 General Information

1-1. General Guidelines

When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

1) Leakage Current Cold Check

2) Leakage Current Hot Check

3) Prevention of Electro Static Discharge (ESD) to Electrostatic Sensitive

1-2. Insurance test

1. Check if there is any leak of current.
2. Cut out the power supply before the repair to avoid an electrical shock hazard.
3. In the case of a live-line test, insulating gloves should be worn to avoid potential electrical shock.
4. Confirm the rated current, voltage and capacity before testing with any kinds of instruments.
5. Watch if the upper door is open when you check something at a lower position.
6. Take out every part in the cabinet before moving the machine, especially things like panels (e.g. glass shelf).
7. Please wear intact cotton gloves when repair any parts of the evaporator, so that scratches by the sharp fins can be avoided.
8. If there is a breakdown with the refrigeration system, please surrender the machine to the service center, else the leaked refrigerant may pollute the atmosphere.
9. The refrigerator use AC of 220V with a frequency of 50Hz.
10. A big fluctuation of voltage (exceed the range 187～242V) may cause a start failure of the refrigerator, a burn-out of the control panel and compressor, or an abnormal sound from the compressor in operation. In this condition an automatic voltage regulator over 60W should be added.
11. Take care not to damage the supply line. Don’t yank at the line; pull the plug out gently from the receptacle. Don’t press the line under the cabinet or step on it. Take care not to roll on or damage the supply line when moves the machine from the wall.
12. In the case of leakage of inflammable gases like carbon monoxide, open the door and windows. Don’t pull out or insert the plugs of the appliance.
13. Don’t touch the refrigeration surface of the freezing compartment when the refrigerator is in operation, especially when your hand is wet, else you may be glued to the surface.
14. Pull out the plug of power supply during clearance or power outage. Wait at least five minutes to resume the power supply in order to prevent damage to the compressor caused by continuous restart.

Photo used in this manual

The illustration and photos used in this Manual may not base on the final design of products, which may differ from your products in some way.

1-3. How to read this Service Manual

The meaning of each icon is described in the table below:

Note:

A “note” provides information that is not indispensable.

Caution:

A “caution” is used when there is danger, through incorrect manipulation, may damage equipment, loose data, get an unexpected result or has to restart (part of) a procedure.

Warning:

A “warning” is used when there is danger of personal injury.

Reference:

A “reference” guides to find additional information on a specific topic.

Chapter 2 Product Feature

2-1. Specifications

	Model		HRF-800DGS8
1.	**Product identification**		
	Description of appliance		Side By Side
	Type of appliance(FS = free standing, BI = built-in)		FS
	Supplier own brand		Haier
2.	**Basic features**		
	Climate class (SN=10~32°C, N=16~32°C, ST=18~38°C, T=18~43°C)		SN.N.ST.T
	Gross capacity	l	800
	Total net capacity	l	792
	Net capacity refrigerator compartment	l	457
	Net capacity freezer compartment (total)	l	335
	Freezing capacity	kg/24 h	16
	Energy consumption	kWh/year	347
	Energy consumption (EN153)	kWh/24 h	0.95
	Max storage time by power failure（Freezer）	h	15
	Refrigerant		R600a/80g
3.	**Control panel**		
	External control display		LED
	Temperature range (from>to)	°C	(Fridge)9~1°C/ (freezer)-24~-14°C
	Super Cooling (Fridge)		YES
	Super Freezing (Freezer)		YES
	Stand-by function (Holidays)		YES
4.	**Basics datas**		
	Voltage / frequency		220/50
	Input power / mains fuse (intensity)	W /A	180/1.8
	Lenght of cable/incl. plug	cm	349
5.	**Packing dimensions**		
	Unit dimensions without handle (H / W / D)	mm	1904*1005*756
	Net weight	kg	120
	Packing dimensions (H / W / D)	mm	2025*1091*851
	Gross weight	kg	194Kg

2-2. Main Functions

◆Full-frequency Control

It incorporates the technologies of frequency conversion, noise reduction, energy conversation, quick-frozen and makes mutual promotion, then keeps the superior performance.

◆ Variable Temperature Function

We set variable temperature drawers in refrigerating chamber, in accordance with types of preserved foods, you can select different gears. It will be more convenient to adjust the variable chamber between Fruits and Vegetable Mode, Frozen Mode, 0° Preservation Mode and Soft Frozen Mode.

◆Noise Reduction Function

Using several noise reduction technology to reduce the noise of refrigerator, such as centrifugal fan noise reduction technology, light sensation night noise reduction and F-D plus frequency conversion technology.

◆Muti-temperature and muti-cycle refrigerating system with air cooling and frostless function

Multi temperature zone with independent control, double evaporator refrigerating system, multipath air supply refrigerating cycle

◆Ultrathin, oversized and super luxurious design

Ultrathin size, oversized volume, big cold store space and big refrigeration space. The refrigerating chamber consists of top grade stalinite commodity shelf and big size fruits and vegetables room.

◆Refrigerating chamber and frozen chamber consisted of several storage spaces which are convenient for food storage by types.

◆Fluoride-free and frostless, full wind cooling refrigerating system and deepin quick-frozen

◆Defrosting pre-cooling system

Judge the temperature in refrigerator before defrosting and perform pre-cooling, control the temperature variation within a narrow range which is better for the preservation of food.

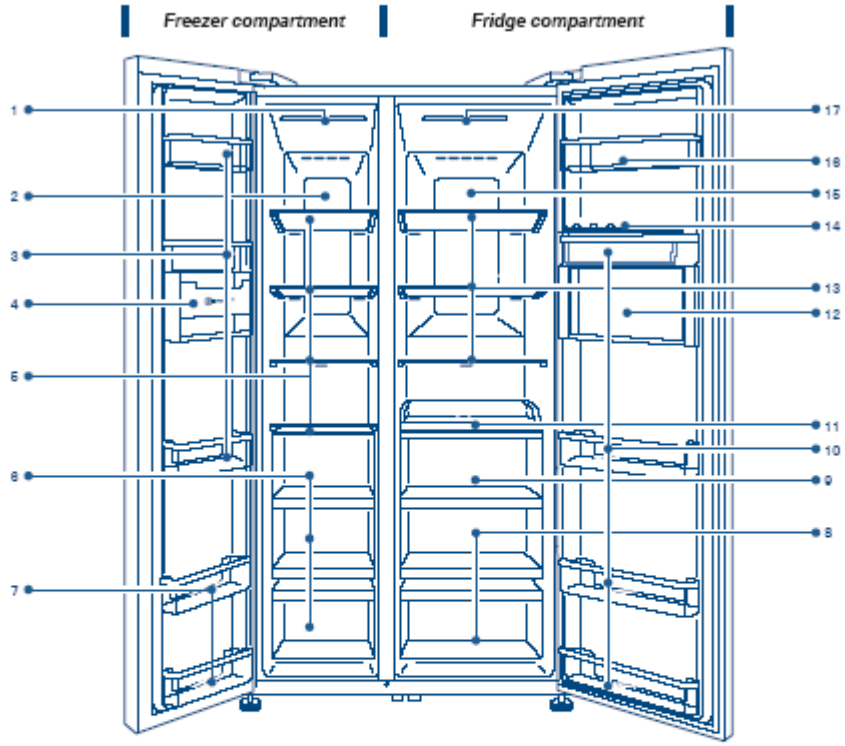
◆Door opening alarms, high definition concealed LED touch display screen

◆High photosynthetic efficiency LED illumination

Dynamic intelligent lighting system consists of energy-efficient area light source and line light source

2-3. External views

Fig.2-1 (HRF-800DGS8)



The HRF- 800DGS8 (Fig.2-1) has the following features:

1. Freezer top LED light
2. Freezer rear decorative lamp
3. Freezer bottle holder
4. Manual icemaker
5. Freezer storage shelves
6. Freezer drawer
7. Freezer 2* bottle holder
8. Fridge drawer
9. My zone drawer
10. Fridge bottle holder
11. Easy slide out storage shelves
12. Seperate room
13. Fridge storage shelves
15. Fridge rear decorative lamp
14. Egg bracket
17. Fridge top LED light
16. Fridge bottle holder

Chapter3 Disassembly and Installation

Note:Unplug the power cord from the outlet when demount the refrigerator;

3-1. REF& freezer wind passage disassembly

1. Remove the screwcover and then remove the screw with cross-screwdriver(See red area on the picture)

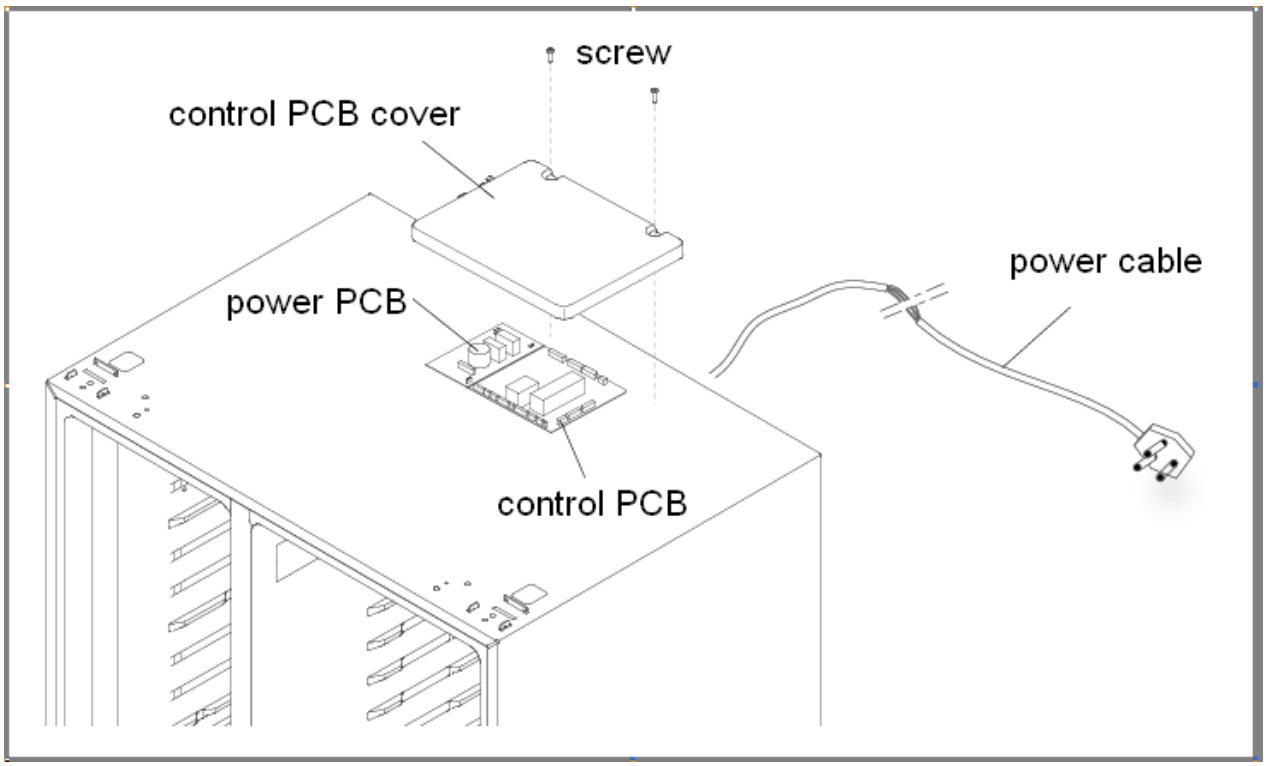
2.Hold the windboard (red area on picture)of wind passage with your hand and then pull it out a little.

3.Disconnect the connector of wind passage (red area on picture) and put it out.

4. Loosen screws fixed the wind passage and put it out

5.Hold the wind_out_let of below wind passage assembly, pull it out a little.Disconnect the connector of wind passage (red area on picture) and put it out.

3-2. Control PCB disassembly



disassemble or open control PCB only for professional

1、 Turn off the power supply;

2、 Loosen screws fixed the control PCB cover and put it out;

3、 Pull out the pin of cable;

4、 Change the damaged control PCB。

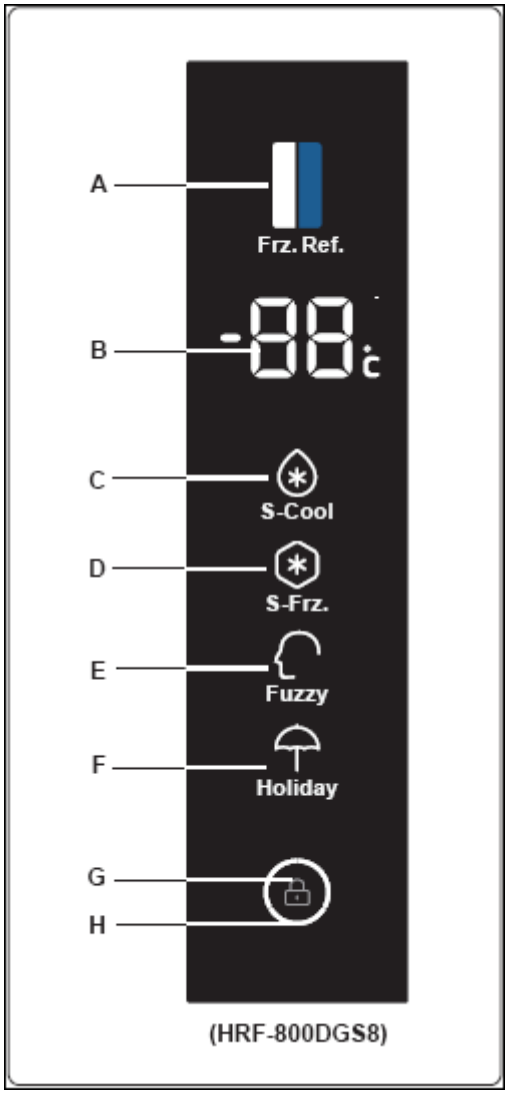
5、 Close control PCB cover and fix it with screw

3-3 Display Panel Disassembly

1. Loosening screw fixed the cover of control panel assembly;

2. Remove the diaplay panel,and disconnect the cable;

Chapter4 Control and display system



Control Panel

A. Frz./Ref. selection icon
B. Temperature adjustment
C. Super cool icon
D. Super freeze icon
E. Fuzzy icon
F. Holiday icon
G. Lock icon
H. Lock halo

Lock/Unlock Setting

The Lock mode is on with ”Lock icon G” highlighted but not “Lock halo H”. The Unlock mode is on with the above icons lighting status reversed.

Set Lock/Unlock as follows:

In the Unlock mode, by pressing “Lock icon G”, the three light points in “Lock halo H” die out antic lock wise, and the refrigerator switches to the Lock mode.

In the Lock mode, by pressing “Lock icon G”, the three light points in “Lock halo H” are highlighted clockwise, and the refrigerator switches to the Unlock mode.

It is not allowed to select Frz./Ref., adjust temperature range, or change the function mode in the Lock mode. If you do the adjustment in Lock mode, “Lock icon G” will flicker, and the panel beeps to alarm the not allowed operation in Lock mode.

In the Unlock mode, the “Lock icon G” switches to Lock mode after being pressed and hold for 3 seconds.

In the Lock mode, the “Lock icon G switches to Unlock mode after being pressed and hold for 3 seconds.

The following descriptions are by default in Unlock mode unless stated specifically.

Energy Saving Control

When all the doors are closed and no operation has been carried out for 30 seconds, the panel will auto set off into Lock mode for energy saving.

Pressing and holding Unlock icon for 3 seconds, or opening any doors, the panel will be lighted again.

Super Cool Mode

Switch on the Super Cool mode if larger quantity of food should be stored (for example after the purchase) or if you want to cool drinks quickly. The Super Cool mode accelerates the cooling of fresh food and protects the goods already stored from undesirable warming. The factory setting temperature is + 2 °C.

Tap “Super cool icon C” to switch on/off Super Cool mode.

The icon C being highlighted means the Super Cool mode is on while the icon C being half lit means the mode is off.

In the Super Cool mode, the refrigerator will automatically switch off the Super Cool mode once reaching the selected temperature. To exit the mode manually, tap “Super cool icon C” to switch it off.

Super Freeze Mode

The Super Freeze function is designed to fully retain the food nutrition in frozen room. The food can be frozen thoroughly in the least time. If you need to freeze a large amount of food once, it is recommended to set the Super Freeze mode on ahead for 12h before the usage of frozen room. By doing so, the compartment can reach the lower temperature as needed to quickly freeze food, retain the full nutrition for easy storage.

Tap “Super freeze icon D” to switch on/off Super Freeze mode. When the icon D being highlighted means the Super Freeze mode is on while the icon D being half lit means the mode is off.

In the Super Freeze mode, the refrigerator will automatically switch off the Super Freeze mode once reaching the selected temperature. To exit the mode manually, tap “Super freeze icon D” to switch it off.

Fuzzy Mode

In the Fuzzy mode, the refrigerator can automatically adjust the temperature range of each compartment based on the ambient and refrigerator’s temperature. This function is totally hand free.

Tap “Fuzzy icon E” to switch on/off Fuzzy mode. When the icon E being highlighted means the Fuzzy mode is on while the icon E being half lit means the mode is off.

In the Fuzzy mode, it is not allowed to set the temperature range for the freezer and the fridge. If you attempt to do so, the Fuzzy icon will flicker and beep to indicate that it is in Fuzzy mode.

Holiday Mode

The Holiday function is designed to meet your need when you decide not to use the fridge compartment for a considered long time. In the Holiday mode, the freezer compartment is free for your setting, while the fridge compartment is automatically set to 17°C (actual temperature is below 17°C) to prevent the compartment giving off an odour and save energy.

So you have the possibility to let the empty fridge compartment closed Tap “Holiday icon F” to switch on/off Holiday mode. When the icon F being highlighted means the Smart mode is on while the icon F being half lit means the mode is off.

Make sure to empty the fridge compartment before setting the Holiday mode.

Some special functions, such as Fuzzy and Super Freeze, cannot be set on in parallel mode because of the contradicting control mechanism. Your selection of one mode will cause the contradicting mode to be automatically set off.

Adjust the Temperature

① Adjust the Temperature for Fridge

Tap “Frz./Ref. icon A” to highlight the fridge section, now you can see the temperature of fridge in the temperature section.

Tap “Temperature adjustment icon B”, the fridge compartment’s temperature is shown in order of “9, 8, 7, 6, 5, 4, 3, 2, 1, 9”. You can slide the “Temperature adjustment icon B” up and down to select the required temperature range. To lower the temperature, slide up and otherwise slide down.

The optimal cooling temperature in the cooling area is 4 °C If you make no adjustment in 5 seconds after tapping, the current temperature range will be displayed. Tap any other icon to confirm the set range.

② Adjust the Temperature for Freezer

Tap “Frz./Ref. icon A” to highlight the freeze section, now you can see the temperature of freeze in the temperature section.

Tap “Temperature adjustment icon B”, the freeze compartment’s temperature is shown in order of “-15, -16, -17, -18, -19, -20, -21, -22, -23, -15”. You can slide the “Temperature adjustment icon C” up and down to select the required temperature range. To lower the temperature, slide up and otherwise slide down.

The optimum temperature in the freezing area is -18 °C.

If you make no adjustment in 5 seconds after tapping, the current temperature range will be displayed. Tap any other icon to confirm the set range.

Door Open Alarm

When the door/s is/are open for a long time or not closed fully, the appliance will tick periodically to alarm you to close the door tight.

Power-off Memory

The working status is stored instantly at the time of power-off, and will be fully restored after power-on.

The status cannot be memorized in Lock mode when power-off. After power-on, the panel will self-check with “Lock icon G” not light and the refrigerator is in Unlock mode.

Turning the appliance off/on

The appliance is in operation as soon as it is connected to the power supply.

Empty the refrigerator before turning the appliance off.

To switch the appliance off unplug the main cable.

Chapter 5 Control principal and related test functions

5-1. Control principle of fan motor

Control of F-fan:

When open any door, the F-fan will be off, after 10 minutes the F-fan will rework if any door still open；and if all door is close，the F-fan will work in normal mode；

If setting the s.FRZ or s.cooling mode, F-fan speed is 1500RPM,In other mode, the speed from 1300 to 1500rpm for different condition like environment temp, setting temp and so on.

Control of C-fan:

C-fan is working in-phase with the compressor and at a mutative speed from 1100 to1400RPM for different environment temp.

5-2. Defrost control

First power on and defrost error mode, the defrost circle is comp working time reach to 4 hours,

At the normal mode: The defrost circle time is alterable; it decided by open door, close door, open door times, temperatures.

When open the door more times, the defrost circle is 7-12 hours;

When open the door less times, the defrost circle is 12-20 hours;

The longest cycle is 73 hours.

5-3. Self-testing function

1.Force start: Under locked mode, press Set-->Ref.Temp-->OK-->Frz.Temp"(A→D→B→C→A) one by one within 5 sec. then press "Set",and the REF and RFZ display icon will display T1,T1**)**

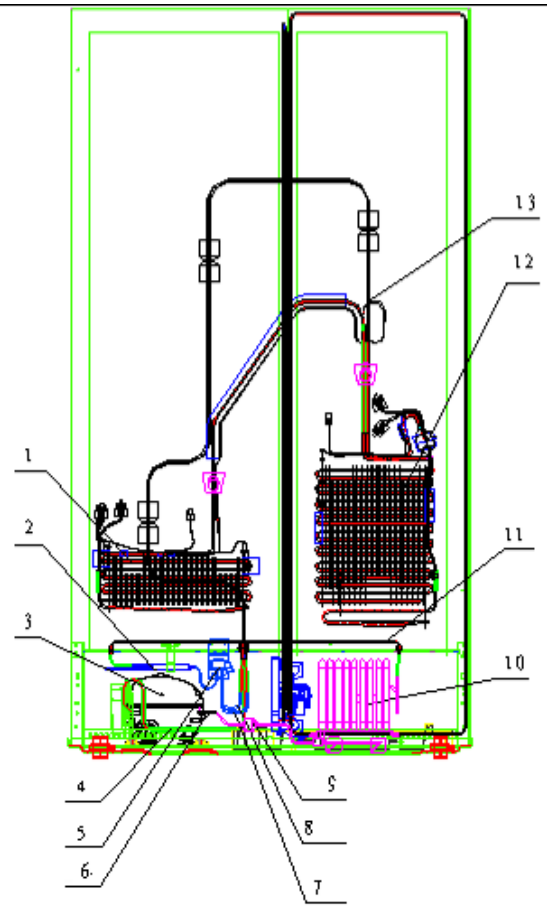
2.Forced defrost :Keep the current state ,and press "Set" ,T2 will be present, then enter forced defrost mode.

3.**Quit**:Keep the current state, press "Set" ,then will be present T3→T4→back to normal display control,and escape from test mode.

MODE	WORKING CONDITION
Force start	1)R and F display areas：T1、T1； 2)Compressor start work； 3)Freezer FAN work with high votage； Cooling FAN work with high votage； 4)defrost heater off； 5)REF air damper open；
Forced defrost	1)R and F display areas：T2、T2； 2)Enter defrost mode： compressor OFF Freezer /Cooloing FAN OFF Defrost heater work， if the D-SNR ≥ 7°C，D HTR work 10 sec and then quit test 2 mode; if the D-SNR＜7°C，D HTR will keep working until the D-SNR ≥ 7°C, and then quit test 2 mode; 3）REF air damper keep close

Quit	Keep the current state, press “Set” ,then will be present T3→T4→back to normal display control,and escape from test mode.

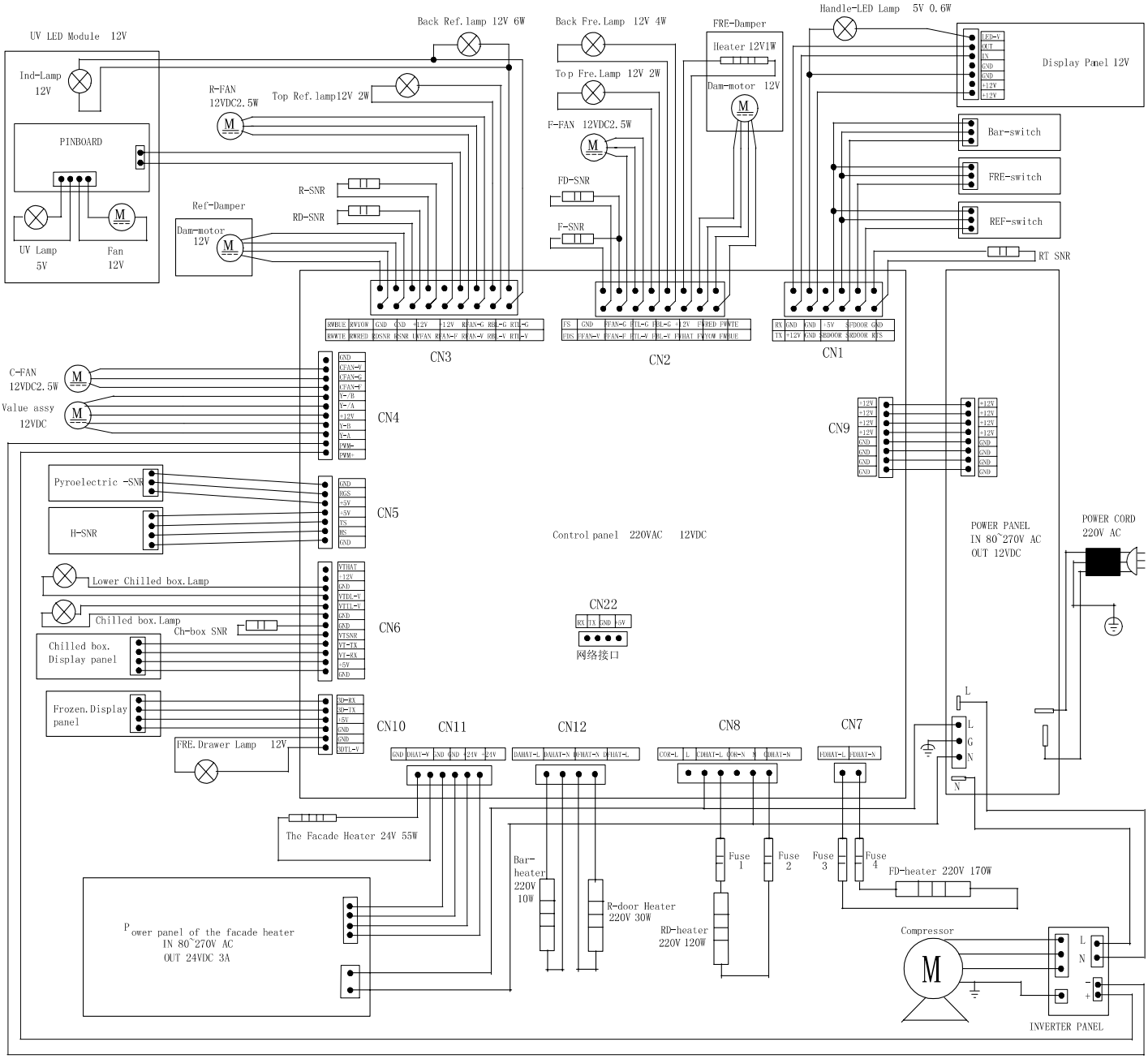
Chapter 6 System flow principle



The list of system components
1 REF evaporator
2 Drier filter
3 Compressor
4 Suction pipe connector
5 Electromagnetic valve
6 Injection tube
7 FRE capillary tube
8 REF capillary tube
9 Silencer
10 Condenser
11 Hot connector pipe for fridge
12 FRE evaporator
13 Suction pipe

Chapter 7 Circuit diagram

7-1. Main control PCB diagram



7-2. Brief principle diagram

Haier

Refrigerator-freezer Type II Frost-free Kühl-Gefrierkombination Réfrigérateur- Congélateur
Frigorificos-Congeladores Frigo-congelatore

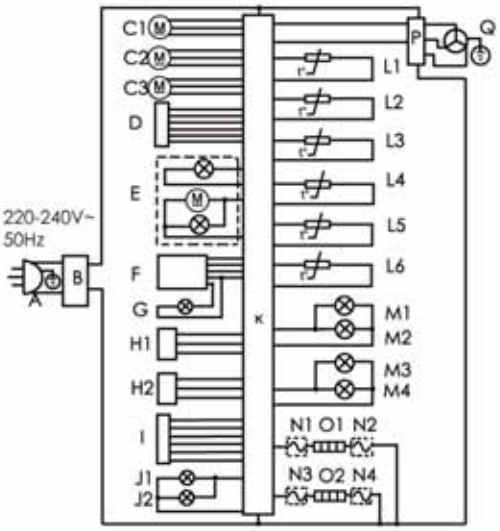
MODEL:HRF-800DGS8

Total gross volume		Bruttoinhalt		Volume brut total		Total capacidad bruta		Capacità lorda totale	800L
Storage volume (refrigerator/freezer)		Nettoinhalt (Kühlteil/Gefrierteil)		Volume net (réfrigérateur/congélateur)		Capacidad neta (refrigerador/congelador)		Capacità netta (frigorifero/congelatore)	435/305L
Blowing gas		Blähmittel		Isolant		Material Aislante		Tipo di isolante	1233zd
Climate class		Klimaklasse		Classe climatique		Clase climática		Classe climatica	SN.N.ST.T
Refrigerant		Kühlmittel		Réfrigérant		Refrigerante		Gas refrigerante	R600a(80g)
Freezing capacity		Gefrierleistung		Capacité de congélation		Capacidad congelador		Capacità di congelamento	16kg/24h
Defrosting input power		Input Leistung fuer FrostEntfernung		Puissance de dégivrage		Potencia modo descongelación		Potenza di scongelamento	175/125W
V~	Hz	W	A	Weight	Freezing Class	Protection Class	Chill Compartment Net Volume	Two-Star Section Net Volume	D/W/H
220-240	50	18	1.8	178kg	****	I	22L	30L	756/1005/1904

Serial Number
Qingdao Haier Joint Stock Co.,Ltd.
Qianwangang Road,Haier Industrial Zone in Economy
&Technology Development Zone,Qingdao,Shandong 266510 China.
MADE IN CHINA

Haier

Refrigerator/Freezer HRF-800DGS8

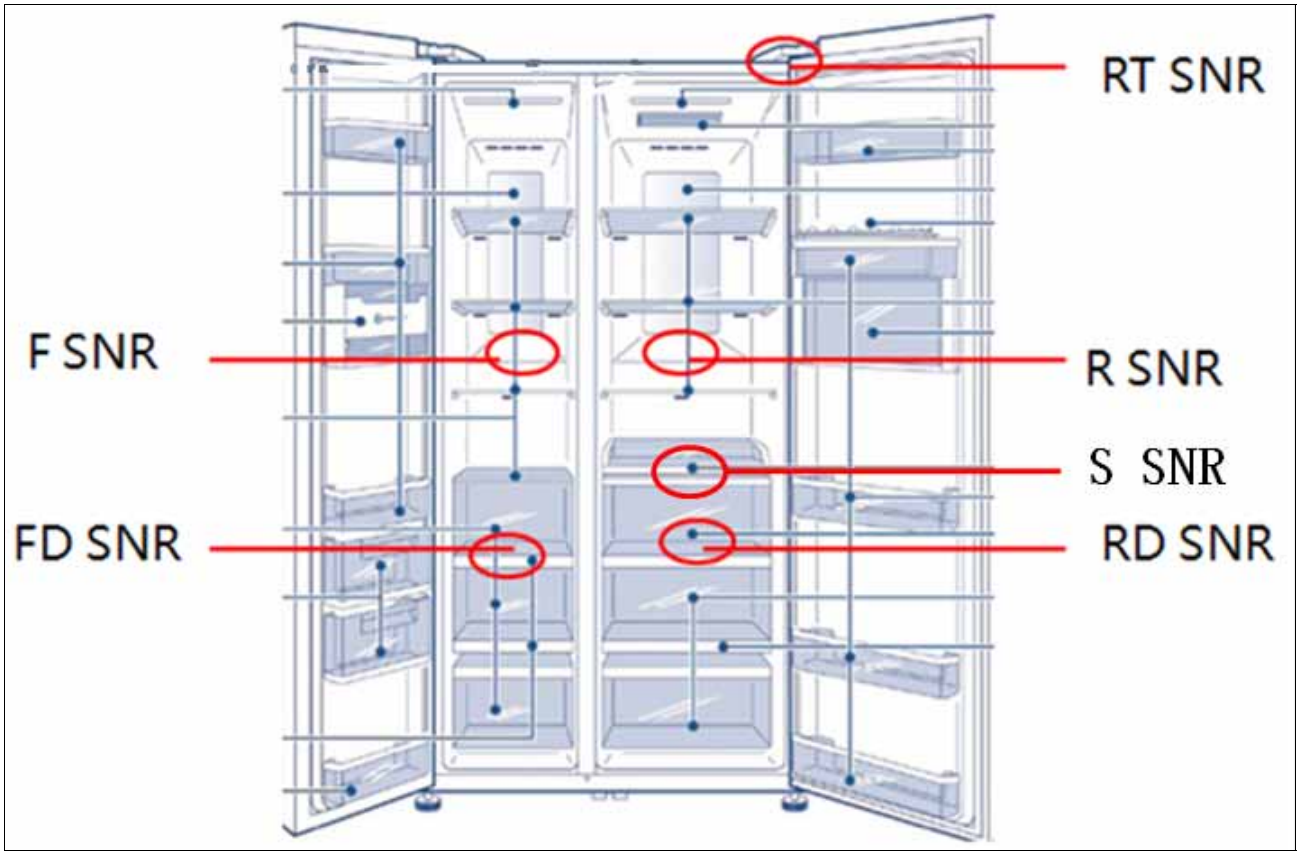


A. Power plug
B. Power panel
C1.Condenserfan motor
C2.Evaporator fan moter
C3.Evaporator fan moter
D.Ref.damper
E. UV sterilizer
F. Display panel
G. Handle lighting
H1. Ref.door switch
H2. Fre.door switch
I.Chilled control panel
J1.Chilled box lighting
J2.Fresh box lighting
K.Control panel
L1.Ref.sensor
L2.Ref.defrosting sensor
L3.Fre.sensor
L4.Chilled box sensor
L5. External temp.sensor
L6. Fre.defrosting sensor
M1.Ref.upper lighting
M2.Ref.back lighting
M3.Fre.upper lighting
M4.Fre.back lighting
N1.Ref.thermo cut-out 1
N2.Ref.thermo cut-out 2
N3.Fre.thermo cut-out 1
N4.Fre.thermo cut-out 2
O1.Ref.defrosting heater
O2.Fre.defrosting heater
P. Inverter panel
Q. Compressor

Qingdao Haier Joint Stock Co.,Ltd.

7-3. Sensors and error codes

Sensor Location



Sensor name	marker	Location	Fuction
Freezer sensor	F SNR	Middle of below freezer wind passage assembly	Measure the temp. of FRZ compartment
REF sensor	R SNR	Middle of below REF wind passage assembly	Measure the temp. of REF compartment
My zone sensor	S SNR	In my zone drawer	Measure the temp. of zone drawer
FRZ defrost sensor	RD SNR	In FRZ evaporator assembly	Measure the temp. of FRZ evaporator
RT sensor	RT SNR	Under the right hinge box	Measure the temp. of circumstance
REF defrost sensor	FD SNR	In REF evaporator assembly	Measure the temp. of REF evaporator

Error code lise:

NO	Malfunction	Error Indicator	Error code meaning
1	normal	--	--
2	RT SNR failure	F2	RT SNR is short circuit or open circuit
3	F SNR failure	F3	F SNR is short circuit or open circuit
4	R SNR failure	F4	R SNR is short circuit or open circuit
5	REF defrost sensor failure	F1	REF defrost sensor is short circuit or open circuit
6	FRZ defrost sensor failure	F6	FRZ defrost sensor is short circuit or open circuit
7	My zone sensor failure	F5	My zone sensor s short circuit or open circuit
9	failure communication	E0	No reflect when setting ,between display PCB and Power PCB no signal transmitted over 2 min
10	Freezer fan motor failure	E1	Freezer fan motor low rev
11	Cooling fan motor failure	E2	Cooling fan motor low rev
12	REF fan motor failure	E6	REF fan motor low rev
13	REF defrost failure	EC	REF defrost display lower 7℃ when REF defrost heater work more zhan 60minute
14	FRZ defrost failure	Ed	FRZ defrost display lower 7℃ when FRZ defrost heater work more zhan 60minute

Attention:These error codes cannot be displayed automatically)

E0>EC>Ed>F3>F1>F6>F2>F4>F5>E1>E2>E6

7-4. The combination key

Combination of keys can enter under the state of unlocking.

A、The function of exhibition hall:

Entry Methods：Press Temperature zone all through and press intelligent icon five times；Buzzer sounds once.

Function mode：Under the default state, lit from top to bottom in order, then automatic switching icon and select temperature zone room once, at the same time display temperature switch once, lit again from top to bottom in order cycle.

Exit Methods: Temperature zone selection and intelligent five times; a buzzer sounds, display before entering state.

Note: in exhibition mode, the freezing temperature of fixed display -18, refrigerated fixed display 04. The mode don`t memory function after the power failure.

B、 Clear EEPORM：

Entry Methods：Press Temperature zone all through and press lock icon five times；Buzzer sounds once.

Function mode： Empty Information in the EEPROM, refrigerator returns to the first state of power on.

Exit Methods: Press and exit automatically.

C、Fault code

Entry Methods：Press Temperature zone all through and press fast freeze five times；Buzzer sounds once.

Functional model: If the refrigerator has no fault, temperature display region will display the "- -"; or it will display in accordance with the provisions of note failure mode, then press locking function and display multiple fault according to the fault priority by recycling.

Exit way: If the refrigerator has no fault, the "- -" will disappear and exit after 5 seconds; fault withdrawal automatically when no button action after 20 seconds; Pressing Temperature zone all through and fast freeze five times again can be manually exit.

Chapter 8 Refrigerator control principle

8-1.The refrigerator temperature control introduction

Switch point of fridge setting temperature is based on fridge sensor SNR temperature;

When the fridge SNR temperature is greater than the starting point, fridge`s large wind door will open;

When the fridge SNR temperature is less than shutdown point, fridge`s large wind door will close;

When the refrigerator SNRF temperature is greater than switch point, freezer fan motor will start, or fan motor will stop.

Variable temperature position regulate by setting variable room`s key-press panel, the initial setting state is in the fresh food section, once press set key, temperature position shift from right to left by recycling.

When the variable room SNRD SNR temperature is greater than the starting point，fridge`s small wind door will open, or will close.

8-2. The defrosting control introduction

First power on to defrost & under fault state，compressor accumulatively work 5Hr, enter the state of defrosting, fridge and freezer defrosting frozen at a time;

And do statistic and judgment according to the running time of compressor and refrigeration，frozen door switch`s opening time, then defrosting fridge and freezer separately or simultaneously.

Under normal working condition:

Defrosting cycle can change by defrosting control, change defrosting cycle and the door opening and closing times and time, inner temperature is related to environmental temperature.

Freezer defrosting:

When freezer door open more frequently, according to the different frequency, compressor defrost one time every working 7~12 hours;

When freezer door open less times, according to the different frequency, compressor defrost one time every working 12~24 hours;

The longest time for defrosting is refrigerator running 72 hours;

Fridge defrosting

When fridge door open more frequently, according to the different frequency, compressor defrost one time every working 3~6 hours;

When fridge door open less times, according to the different frequency, compressor defrost one time every working 6~12 hours;

The longest time for defrosting is refrigerator running 72 hours;

Chapter 9 Trouble shooting

Consulting of typical fault and the measures to solve the common problems

Num	fault phenomenon	Detection method	Maintenance measures	Use tools
1	Do not power on	1、Detect whether main control panel, display panel and frequency conversion panel is matching ; 2、detect whether frequency conversion panel and main control panel is connected properly; 3、Detect whether Connecting line between frequency conversion panel and compressor is normal; 4、Detect whether main control panel output frequency signal 5、Enter the mandatory start to detect whether compressor is working;	Replace correct Component	Screwdriver 、multimeter
2	Door body is uneven	Side by side series: 1、Minor unevenness can adjust bottom foot; 2、 Large height difference can increase the gasket in the lower hinge parts; 3、Adjustable hinge door body can adjust hinge to be even;	Adjust & Repair	Screwdriver 、multimeter、poke rod
3	Fridge is in deep freeze cooling	1、Closing the fridge air outlet, detect air outlet position and assembly whether cold air blowing around, if that is not tightly sealed; 2、Take fridge electric air outlet apart, repeatedly switching freezer, detect whether air door can freely switch on/off, and close closely; 3、If the Department does not move, you can test damper wiring terminal position and the main control panel ,and check every line`s conducting state according to the color; 4、If line is normal but throttle can`t act, that means main control panel or throttle fault; use the normal throttle or main control panel for testing to confirm final faulted piece; 5、The above detection without problems, test whether parameters of fridge sensor 1 are normal.	1、If throttle is not tightly sealed, seal lax part with Sponge article; 2、If padlock is not tightly closed, generally throttle is bad; 3、maintain line section； 4、Replace the defective part； 5、Replace sensor.	Screwdriver 、multimeter

4	Sometimes panel shows fault code, or displays abnormal temperature	1、Check connector between freezer sensor and the box body, and the internal terminal backing out, ensure contact well; 2、Test parameter of freezer sensor; 3、Detecting frozen sensor terminal of main control panel contact well;	If terminal take off, adjust and repair internal terminal	Screwdriver
5	Display panel shows E0	1、Detecting top hinge of freezer door connecting terminal, main control panel and display panel terminal contact well; 2、Detecting main control panel and display panel match well; 3、Detecting dynatron is normal around display panel and main control panel connector;	1、check and repair circuit； 2、replace applicable main control panel and/or display panel 3、check and repair main control panel and display panel	Screwdriver、multimeter
6	Display Ed	1、Detecting defrosting fuse is not open; 2、Detecting defrosting sensor parameters are normal; 3、Detecting defrosting fuse is normal; 4、Detecting contact of above components` connector is normal; 5、Enter mandatory defrosting, detecting heating fuse heat up, and main control panel has output voltage; 6、If above condition is normal, because defrosting sensor to sense the temperature is not in time, you can move defrosting sensor`s location down to about 10cm. Note: displaying Ed means defrosting system is bad, and not means certain unit is bad, but as long as the refrigerator Power down and power on, the fault code disappeared; Display panel display normally, but do not means repaired; If you do not solve the problem, it will show again after a day（When you maintain Must pay attention to avoid a service being not in place thoroughly）.	Replace fault part, t adjust terminal	Screwdriver、multimeter
7	Noise loudly	1、Check noise part, according to the noise portion for detecting the freezing fan motor is working normally; 2、Checking fan bracket is secure, and evaporator pipe is not mutually touch; 3、Detecting compressor floor casters is not resonant. 4、Detecting compressor condenser pipe and muffler is not mutual touch;	1、check and repair fan motor 2、Reinstall and fix fan motor, adjust vaporizer pipeline and add vibration	Screwdriver、multimeter

		5、Evaporator may send the ice cracked voice in the defrosting process, this is a normal phenomenon while defrosting.	attenuation mud. 3 、 Adjust the bottom seat, ensure each seat to stress for avoiding resonance.	

SERVICE MANUAL

Model: HRF-800DGS8

Issue	2014-11-13
REF.	Ref1411S025V1

Sincere forever

Haier Group

Haier Industrial Park, No.1, Haier Road

266101, Qingdao, China

http://www.haier.com